

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-13 (Canceled).

14. (Currently Amended): An isolated microorganism comprising:
a nucleic acid sequence that encodes the amino acid sequence of SEQ ID NO: 2, or
a nucleic acid sequence from *Alcaligenes*, which encodes D-aminoacylase and which
comprises the following sequence of restriction sites: Sal I, Bgl II and Pvu II ~~EcoR I—Bgl II—
Pvu II—Hind III~~;

wherein said microorganism is zinc resistant, and
wherein the ~~expression~~ activity of D-amino acylase from said nucleic acid sequence in
said microorganism is enhanced in the presence of zinc ion.

15. (Previously Presented) The isolated microorganism of Claim 14 that comprises a
nucleic acid sequence that encodes SEQ ID NO: 2.

16. (Previously Presented) The isolated microorganism of Claim 14 that comprises
the nucleic acid sequence of SEQ ID NO: 1.

17. (Currently Amended) The isolated microorganism of Claim 14 that comprises a
D-amino acylase gene from *Alcaligenes*, the expression of the gene product of which is
enhanced in the presence of zinc ion, which encodes a D-aminoacylase and which comprises
the following sequence of restriction sites: Sal I, Bgl II and Pvu II ~~EcoR I—Bgl II—Pvu II—
Hind III~~.

18. (Previously Presented) The isolated microorganism of Claim 14, wherein the D-aminoacylase-producing gene is obtained from *Alcaligenes xylosoxidans*, *subsp. xylosoxidans* strain A-6.

19. (Currently Amended) The isolated microorganism of Claim 14, wherein the D-aminoacylase-producing gene is has been modified by inserting a specific nucleotide sequence, GAAGGA₂ (SEQ ID NO: 3)₂ in the ribosome-binding site in the position of the ninth base upstream of the translation initiation point of the gene.

20. (Previously Presented) The isolated microorganism of Claim 14, wherein the D-aminoacylase-producing gene is modified by:

creating a *Hind III* recognition site upstream and downstream from the D-aminoacylase gene,

excising or purifying the resulting modified gene and

ligating the modified gene into an expression vector.

21. (Currently Amended) The isolated microorganism of Claim 14, wherein the zinc ~~tolerance~~ resistance of the host microorganism is such that the cell weight of the microorganism either increases, or decreases, within a range of 10% in a culture medium with 2 mM zinc added thereto on the basis of the cell weight measured at A660 nm in a zinc-free culture medium.

22. (Currently Amended) The isolated microorganism of Claim 14, wherein the zinc ~~tolerance~~ resistance of the microorganism is such that the cell weight of the microorganism either increases, or decreases, within a range of 20% in a culture medium with 5 mM zinc

added thereto on the basis of the cell weight measured at A660 nm in a zinc-free culture medium.

23. (Previously Presented) The isolated microorganism of Claim 14, which is *Escherichia coli*.

24. (Previously Presented) A process for producing D-aminoacylase comprising:
culturing the isolated microorganism of Claim 14 in a culture medium containing zinc
and
recovering D-aminoacylase.

25. (Previously Presented) The process of Claim 24, further comprising culturing said microorganism in a medium containing a *tac* promoter-inducing substance.

26. (Previously Presented) The process of Claim 24, wherein said promoter-inducing substance is isopropyl thiogalactoside (IPTG) or lactose.

27. (Previously Presented) The process of Claim 24, wherein said culture medium has a concentration of lactose ranging from 0.1 to 1%.

28. (Currently Amended) An isolated nucleic acid sequence:
which encodes the amino acid sequence of SEQ ID NO: 2, or
which encodes a D-aminoacylase from *Alcaligenes*, and which comprises the
following sequence of restriction sites: Sal I, Bgl II and Pvu II ~~EcoR I Bgl II Pvu II~~
~~Hind III~~ and

wherein said isolated nucleic acid sequence comprises an upstream ribosome binding site comprising GAAGGA (SEQ ID NO: 3).

29. (Previously Presented) The isolated nucleic acid sequence of Claim 28, which encodes the amino acid sequence of SEQ ID NO: 2.

30. (Previously Presented) The isolated nucleic acid sequence of Claim 28, further comprising an EcoR I site before said Sal I site and a Hind III site after the Pvu II site ~~which is a D-aminoacylase gene from *Alcaligenes*, which comprises the following sequence of restriction sites: EcoR I – Bgl II – Pvu II – Hind III.~~

31. (Previously Presented) A vector comprising the nucleic acid sequence of Claim 28.

32. (Currently Amended) An isolated nucleic acid sequence from *Alcaligenes* that encodes a D-aminoacylase and which comprises the following sequence of restriction sites: Sal I – Bgl II – Pvu II and

wherein said nucleic acid sequence comprises an upstream ribosome binding site comprising GAAGGA (SEQ ID NO: 3).

33. (Previously Presented) A vector comprising the nucleic acid sequence of Claim 32.

34. (Previously Presented) A zinc-resistant host cell comprising the nucleic acid sequence of Claim 32.